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NOTICE OF ALLOWANCE AND FEE(S) DUE

81722 7590 03/03/2010

Viering, Jentschura & Partner
3770 Highland Ave.
Suite 203
Manhattan Beach, CA 90266

EXAMINER

ALIA, CURTIS A

ART UNIT

PAPER NUMBER

2474

DATE MAILED: 03/03/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,441	02/27/2004	Peter Ascheuer	P40703US	5002

TITLE OF INVENTION: METHOD AND SYSTEM FOR MULTI-CHANNEL DATA TRANSMISSION TO A PLURALITY OF SUBSCRIBERS IN A
BLUETOOTH NETWORK

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/03/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE** OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Complete and send this form, together with applicable fee(s), to: **Mail** **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

81722 7590 03/03/2010

Viering, Jentschura & Partner
3770 Highland Ave.
Suite 203
Manhattan Beach, CA 90266

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/789,441 02/27/2004 Peter Ascheuer P40703US 5002

TITLE OF INVENTION: METHOD AND SYSTEM FOR MULTI-CHANNEL DATA TRANSMISSION TO A PLURALITY OF SUBSCRIBERS IN A BLUETOOTH NETWORK

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/03/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
ALIA, CURTIS A	2474	370-280000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/147; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____
Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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81722	7590	03/03/2010	EXAMINER	
Viering, Jentschura & Partner 3770 Highland Ave. Suite 203 Manhattan Beach, CA 90266			ALIA, CURTIS A	
			ART UNIT	PAPER NUMBER
			2474	

DATE MAILED: 03/03/2010

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 795 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 795 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability**Application No.**

10/789,441

Examiner

Curtis A. Alia

Applicant(s)

ASCHEUER ET AL.

Art Unit

2474

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to After-Final Amendment filed 19 February 2010.
2. ☒ The allowed claim(s) is/are 20,21,23,24,26-37 and 39-41.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Curtis A Alia/
Examiner, Art Unit 2474

DETAILED ACTION

Response to Amendment

Applicant's amendment filed 19 February 2010 has been entered. Claim 26 has been amended. Claims 20, 21, 23, 24, 26-37 and 39-41 are still pending in this application, with claims 20 and 34 being independent. Please note that AU 2416 has been changed to AU 2474.

Response to Arguments

1. Applicant's arguments, see Remarks, filed 19 February 2010, with respect to claims 20 and 34 have been fully considered and are persuasive. The rejection of the claims has been withdrawn.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 19 February 2010 was filed after the mailing date of the Final Office Action on 27 November 2009. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Examiner's Amendment

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Christopher Frerking (Reg. No. 42,557) on 23 February 2010.

The application has been amended as follows:

Claim 23. The method according to claim 20, characterized in that at least one of the group consisting of the first communication channel and the second communication channel includes [[an]] a Synchronous Connection Oriented (SCO) data link, with a time interval of $T_{SCO}=4 \text{ time slots}$ or $T_{SCO}=6 \text{ time slots}$.

Claim 24. [[A]] The method according to claim 21, characterized in that at least one of the group consisting of the first communication channel and the second communication channel includes an Asynchronous Connectionless (ACL) data link which is operated in at least one of the group consisting of the sniff mode and the park mode.

Claim 30. The method according to claim 20, further comprising:
counting the number of zero crossings which have occurred since the setting-up establishment of the first communication channel for synchronization purposes; and [[.]]
setting up the second communication channel using the counted number to determine the phase angle offset with respect to the first communication channel.

Claim 34. A data transmission system which is based on the Bluetooth standard, comprising:

a master subscriber[.];

first and second slave subscribers operable to communicate data packets with the master subscriber by radio using ~~a time slot method~~; time slots;

a first communication channel providing data interchange between the master subscriber and the first slave subscriber[.];

a second communication channel providing data interchange between the master subscriber and the second slave subscriber, the second communication channel performing data exchange during a specified time slot, the specified time slot determined based upon a time slot in which data exchange occurs in the first communication channel;

a control device operable to control a setting up of the first and second communication channels as well as a timing of the data interchange between the master subscriber and each of the first and second slave subscribers, the control device being configured to determine synchronization parameters for synchronization of the second communication channel, the synchronization parameters defining a phase offset between a first data interchange and a second data interchange, the first data interchange between the master subscriber and the first slave subscriber via the first communication channel and the second data interchange between the master subscriber and the second slave subscriber via the second communication channel.

Allowable Subject Matter

4. Claims 20, 21, 23, 24, 26-37 and 39-41 are allowed.
5. The following is an examiner's statement of reasons for allowance:

Prior art reference to Morris (previously cited US 7,042,863) discusses efficient time-division configuration of systems with a master device and slave devices. Particularly, Morris teaches that multiple (up to 7) slave devices can be connected to a master and are allocated time slots to perform data transmissions. This system, however, does not teach that a second communication channel is allocated time slots by synchronizing the second communication channel to a first communication channel, nor does it teach that synchronization parameters are determined for defining a phase offset between a first data interchange and a second data interchange.

Prior art reference to Lee et al. (previously cited US 2002/0064134) discloses a master for Bluetooth communication and method for establishing a beacon channel. Particularly, Lee teaches that the master sends beacons to synchronize with the slave devices. However, the beacon communicated to the slave devices cannot be construed as a first communication channel to which the second communication channel synchronizes to. Further, no synchronization parameters and no phase offset information are determined during the synchronization process.

Prior art reference to Desblancs et al. (newly cited US 2002/0018459) discloses a method for synchronizing two interfaces. While the method discloses synchronizing two interfaces, they are not transmitting based on the Bluetooth standard, nor do they share synchronization parameters that define a phase offset between a first data interchange and a second data interchange. Also, Desblancs discloses synchronizing the devices during a period of time in which shared resources are not being used and when there is no communication between the networks, which is contrary to the claimed limitation. The claim recites synchronizing the second communication channel includes causing data exchange during a specified time slot...based upon a time slot in which data exchange occurs in the first communication channel.

For the reasons above, the prior art of record fails to disclose, teach or suggest each and every claimed limitation of the claims of the present application.

Claims 20, 21, 23, 24 and 26-33 contain statutory subject matter with respect to 35 USC 101 because the method claims are directed to data transmissions between master and slave devices in a Bluetooth network.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis A. Alia whose telephone number is (571) 270-3116. The examiner can normally be reached on Monday through Friday, 9am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung S. Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Curtis A Alia/
Examiner, Art Unit 2474
2/23/2010

CAA

/Steven HD Nguyen/
Primary Examiner, Art Unit 2473